SEQUENCE LISTING

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Nelson Barton
Kevin Chow

<120> Method of Making A Protein Polymer and
Uses of the Polymer

<130> DVSA-1005US

<150> 60/250,426
<151> 2000-11-30

<160> 10

<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 624
<212> DNA
<213> Pyrodictium abyssi

<400> 1
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ctagcaggct tcgccaccac ccagagcccc ctcaacagct tctacgccac cggtacagca 120
caggcagtaa gcgagccaat agacgtagaa agccacctcg gcagcataac ccccgcagcc 180
ggcgcacagg gcagtgacga cataggttac gcaatagtgt ggataaagga ccaggtcaat 240
gatgtaaagc tgaaggtgac cctgcgtaac gctgagcagc taaagcccta cttcaagtac 300
ctacagatac agataacaag cggctatgag acgaacagca cagctctagg caacttcagc 360
gagaccaagg ctgtgataag cctcgacaac cccagcgccg tgatagtact agacaaggag 420
gatatagcag tgctctatcc ggacaagacc ggttacacaa acacttcgat atgggtaccc 480
ggtgaacctg acaagataat tgtctacaac gagacaaagc cagtagctat actgaacttc 540
aaggccttct acgaggctaa ggagggtatg ctattcgaca gcctgccagt gatattcaac 600
ttccaggtgc tacaagtagg ctaa 624

<210> 2
<211> 207
<212> PRT
<213> Pyrodictium abyssi

<400> 2
Val Lys Tyr Thr Thr Leu Ala Ile Ala Gly Ile Ile Ala Ser Ala Ala
1 5 10 15
Ala Leu Ala Leu Leu Ala Gly Phe Ala Thr Thr Gln Ser Pro Leu Asn
20 25 30
Ser Phe Tyr Ala Thr Gly Thr Ala Gln Ala Val Ser Glu Pro Ile Asp
35 40 45
Val Glu Ser His Leu Gly Ser Ile Thr Pro Ala Ala Gly Ala Gln Gly
50 55 60
Ser Asp Asp Ile Gly Tyr Ala Ile Val Trp Ile Lys Asp Gln Val Asn
65 70 75 80

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Asp Val Lys Leu Lys Val Thr Leu Arg Asn Ala Glu Gln Leu Lys Pro
                85                  90                  95
Tyr Phe Lys Tyr Leu Gln Ile Gln Ile Thr Ser Gly Tyr Glu Thr Asn
            100                 105                 110
Ser Thr Ala Leu Gly Asn Phe Ser Glu Thr Lys Ala Val Ile Ser Leu
        115                 120                 125
Asp Asn Pro Ser Ala Val Ile Val Leu Asp Lys Glu Asp Ile Ala Val
    130                 135                 140
Leu Tyr Pro Asp Lys Thr Gly Tyr Thr Asn Thr Ser Ile Trp Val Pro
145                 150                 155                 160
Gly Glu Pro Asp Lys Ile Ile Val Tyr Asn Glu Thr Lys Pro Val Ala
                165                 170                 175
Ile Leu Asn Phe Lys Ala Phe Tyr Glu Ala Lys Glu Gly Met Leu Phe
            180                 185                 190
Asp Ser Leu Pro Val Ile Phe Asn Phe Gln Val Leu Gln Val Gly
        195                 200                 205
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<210> 3
<211> 513
<212> DNA
<213> Pyrodictium abyssi

<400> 3
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ctagcaggct tcgccaccac ccagagcccg ctcaacagct tctacgccac cggcacagca 120
gccgcaacaa gcgagccaat agacgtagag agccacctca gcagcatagc ccctgctgct 180
ggcgcacagg gcagccagga cataggctac ttcaacgtga ccgccaagga tcaagtgaac 240
gtgacaaaga taaaggtgac cctggctaac gctgagcagc taaagcccta cttcaagtac 300
ctacagatag tgctaaagag cgaggtagct gacgagatca aggccgtaat aagcatagac 360
aagcctagcg ccgtcataat actagacagc caggacttcg acagcaacaa cagagcaaag 420
ataagcgcca ctgcctacta cgaggctaag gagggcatgc tattcgacag cctaccgcta 480
atattcaaca tacaggtgct aagcgtcagc taa                              513
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<210> 4
<211> 170
<212> PRT
<213> Pyrodictium abyssi

<400> 4
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Val Lys Pro Thr Ala Leu Ala Leu Ala Gly Ile Ile Ala Ser Ala Ala
 1               5                  10                  15
Asp Leu Ala Leu Leu Ala Gly Phe Ala Thr Thr Gln Ser Pro Leu Asn
            20                  25                  30
Ser Phe Tyr Ala Thr Gly Thr Ala Ala Ala Thr Ser Glu Pro Ile Asp
        35                  40                  45
Val Glu Ser His Leu Ser Ser Ile Ala Pro Ala Ala Gly Ala Gln Gly
    50                  55                  60
Ser Gln Asp Ile Gly Tyr Phe Asn Val Thr Ala Lys Asp Gln Val Asn
65                  70                  75                  80
Val Thr Lys Ile Lys Val Thr Leu Ala Asn Ala Glu Gln Leu Lys Pro
                85                  90                  95
Tyr Phe Lys Tyr Leu Gln Ile Val Leu Lys Ser Glu Val Ala Asp Glu
            100                 105                 110
Ile Lys Ala Val Ile Ser Ile Asp Lys Pro Ser Ala Val Ile Ile Leu
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```
        115                 120                 125
Asp Ser Gln Asp Phe Asp Ser Asn Asn Arg Ala Lys Ile Ser Ala Thr
    130                 135                 140
Ala Tyr Tyr Glu Ala Lys Glu Gly Met Leu Phe Asp Ser Leu Pro Leu
145                 150                 155                 160
Ile Phe Asn Ile Gln Val Leu Ser Val Ser
                165                 170
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<210> 5
<211> 537
<212> DNA
<213> Pyrodictium abyssi

<400> 5
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caagcagtaa gcgagccaat agacgtagag agccacctag acaacaccat agcccctgct 180
gccggtgcac agggctacaa ggacatgggc tacattaaga taactaacca gtcaaaagtt 240
aatgtaataa agctgaaggt gactctcgct aacgccgagc agctaaagcc ctacttcgac 300
tacctacagc tagtactcac aagcaacgcc actggcaccg acatggttaa ggctgtgcta 360
agcctcgaga agcctagcgc agtcataata ctagacaacg atgactacga tagcactaac 420
aagatacagc taaaggtaga agcctactat gaggctaagg agggcatgct attcgacagc 480
ctaccagtaa tactgaactt ccaggtactg agcgccgctt gcagtccctt gtggtga   537

<210> 6
<211> 178
<212> PRT
<213> Pyrodictium abyssi

<400> 6
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            20                  25                  30
Ser Phe Tyr Ala Thr Gly Thr Ala Gln Ala Val Ser Glu Pro Ile Asp
        35                  40                  45
Val Glu Ser His Leu Asp Asn Thr Ile Ala Pro Ala Ala Gly Ala Gln
    50                  55                  60
Gly Tyr Lys Asp Met Gly Tyr Ile Lys Ile Thr Asn Gln Ser Lys Val
65                  70                  75                  80
Asn Val Ile Lys Leu Lys Val Thr Leu Ala Asn Ala Glu Gln Leu Lys
                85                  90                  95
Pro Tyr Phe Asp Tyr Leu Gln Leu Val Leu Thr Ser Asn Ala Thr Gly
            100                 105                 110
Thr Asp Met Val Lys Ala Val Leu Ser Leu Glu Lys Pro Ser Ala Val
        115                 120                 125
Ile Ile Leu Asp Asn Asp Asp Tyr Asp Ser Thr Asn Lys Ile Gln Leu
    130                 135                 140
Lys Val Glu Ala Tyr Tyr Glu Ala Lys Glu Gly Met Leu Phe Asp Ser
145                 150                 155                 160
Leu Pro Val Ile Leu Asn Phe Gln Val Leu Ser Ala Ala Cys Ser Pro
                165                 170                 175
Leu Trp
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<210> 7
<211> 311
<212> DNA
<213> Pyrodictium abyssi

<400> 7
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ctcggtacgc taaatactgc cgctggtgca cagggtaagc agacgctagg agacataaca 120
atatatgcgc acaatgacgt gaacataaca aagctaaagg tcacgcttgc taacgctgca 180
cagctaagac catacttcaa gtacctgata ataaagctag taagcctgga cagcaacggc 240
aacgagtccg aggaaaaggg catgataact ctatggaagc cttacgccgt gataatacta 300
gaccatgaag a 311

<210> 8
<211> 130
<212> PRT
<213> Pyrodictium abyssi

<400> 8
Ser Phe Tyr Ala Thr Gly Thr Ala Gln Ala Val Ser Glu Pro Ile Asp
 1   5   10   15
Val Val Ser Ser Leu Gly Thr Leu Asn Thr Ala Ala Gly Ala Gln Gly
            20   25   30
Lys Gln Thr Leu Gly Asp Ile Thr Ile Tyr Ala His Asn Asp Val Asn
        35   40   45
Ile Thr Lys Leu Lys Val Thr Leu Ala Asn Ala Ala Gln Leu Arg Pro
    50   55   60
Tyr Phe Lys Tyr Leu Ile Ile Lys Leu Val Ser Leu Asp Ser Asn Gly
65   70   75   80
Asn Glu Ser Glu Glu Lys Gly Met Ile Thr Leu Trp Lys Pro Tyr Ala
                85   90   95
Val Ile Ile Leu Asp His Glu Asp Phe Asn Asn Asp Ile Asp Gly Asp
            100   105   110
Asn Gln Cys Gln Ile Asp Ala Thr Ala Tyr Tyr Glu Ala Lys Glu Gly
        115   120   125
Met Leu
    130

<210> 9
<211> 372
<212> DNA
<213> Pyrodictium abyssi

<400> 9
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acaatagaga acaagactga cgtgaacgtt gtgaagctga agataaccct cgccaacgct 180
gagcagctaa agccctactt cgactaccta cagatagtgc taaagagcgt tgacagcaac 240
gagatcaagg ctgtgctaag cctcgagaag cccagcgcag tcataatact ggacaacgag 300
gacttccagg gcggcgacaa ccagtgccag atagacgcca ccgcctacta cgaggctaag 360
gagggtatgc ta 372

<210> 10
<211> 124
<212> PRT
<213> Pyrodictium abyssi

<400> 10

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Ser Phe Tyr Ala Thr Gly Thr Ala Glu Ala Thr Ser Glu Pro Ile Asp
 1               5                  10                  15
Val Val Ser Asn Leu Asn Thr Ala Ile Ala Pro Ala Ala Gly Ala Gln
            20                  25                  30
Gly Ser Val Gly Ile Gly Ser Ile Thr Ile Glu Asn Lys Thr Asp Val
        35                  40                  45
Asn Val Val Lys Leu Lys Ile Thr Leu Ala Asn Ala Glu Gln Leu Lys
    50                  55                  60
Pro Tyr Phe Asp Tyr Leu Gln Ile Val Leu Lys Ser Val Asp Ser Asn
65                  70                  75                  80
Glu Ile Lys Ala Val Leu Ser Leu Glu Lys Pro Ser Ala Val Ile Ile
                85                  90                  95
Leu Asp Asn Glu Asp Phe Gln Gly Gly Asp Asn Gln Cys Gln Ile Asp
            100                 105                 110
Ala Thr Ala Tyr Tyr Glu Ala Lys Glu Gly Met Leu
        115                 120
```